REMARKS

Examiner rejects claims 11-20 under 35 U.S.C. 102(b) as being anticipated by or, in the alternative, 35 U.S.C. 103(a) as being unpatentable over Ouhadi (EP 921153) or Zhang et al. (WO 0119920) and under 35 U.S.C. 102(a or e) as being anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being unpatentable over Varma (US 2002/0160137).

The Examiner rejects Applicant's invention as anticipated by EP0921153 to Ouhadi, or in the alternative as obvious in view of Ouhadi. Applicant respectfully disagrees with Examiner because there are numerous differences between Applicant's invention and the teachings of Ouhadi. Anticipation is an exacting standard. Under 35 U.S.C. §102, in order for a single prior art reference to anticipate a claim, every limitation of that claim must identically appear in the reference. "For a prior art reference to anticipate in terms of 35 U.S.C. § 102, every element of the claimed invention must be identically shown in a single reference." *In re Bond*, 910 F.2d 831, 832-3, 15 USPQ2d 1566, 1567 (Fed. Cir. 1990).[1] Ouhadi does not identically show every element contained in claim 11 of Applicant's invention. Applicant's claim 11 requires two (with an optional third) specific elements for the composition: 1) a majority of styrenic block copolymer, 2) a lesser amount of a second thermoplastic resin, and 3) a plasticizing oil. Further, the first element, the styrenic block copolymer, is required to have very particular properties. If it does not possess these specific properties, the element of claim 11 is not met.

[1] See also *Diversitech Corp. v. Century Steps, Inc.*, 850 F.2d 675, 677, 7 USPQ2d 1315, 1317 (Fed. Cir. 1988).

Ouhadi does not teach a composition with the specific requirements of Applicant's claim 11. While Ouhadi does disclose the use of an SBC (styrene block copolymer) substantially in the form of SBS, SIS, SIBS, SEBS, and SEPS, (see Ouhadi paragraph 31) it is silent with respect to the key features and characteristics of the SBC required by Applicant's claim 11. In its entirety, Applicant's claim 11, the claim from which all dependent claims depend, states:

> A composition to be used for the manufacture of transparent, gel-free films, comprising:
> a) at least 65 wt% of a styrenic block copolymer, having a molecular structure according to the formula S-(I/B)-S (1) or [S-(I/B)]nX (2),
> wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30,
> wherein said polymer block (I/B) has a glass transition temperature (Tg) of at most -60°C (determined according to ASTM E-l356-98),
> wherein n is an integer equal to or greater than 2, and
> wherein X is the residue of a coupling agent,
> wherein said styrenic block copolymer having a poly(styrene) content in the range of from 28 to 31 % by weight, having poly(styrene) blocks S of a true molecular weight in the range of from 10,000 to 15,000, having an apparent molecular weight of the complete block copolymer in the range of from 110,000 to 160,000 and wherein the diblock S-(I/B) optionally occurs in a content of at most 20 mol%,
> b) from 5 to 25 wt% of a second thermoplastic resin,
> c) from 0 to 10 wt% of a plasticizing oil,
> the sum of the percentages of the components a, b and c being 100%, and all weight percentages being relative to the weight of the complete composition.

As can be seen from the claim, there are numerous properties that the SBC must possess. Specifically, claim 11 requires that the SBC have a glass transition temperature (Tg) of at

most -60°C; it must have the structure S-(I/B)-S or [S-(I/B)]nX wherein each S independently is a polymer block of predominantly styrene and (I/B) is a substantially random polymer block of predominantly isoprene and butadiene in a mutual weight ratio in the range of from 30/70 to 70/30; the S blocks must have a true molecular weight in the range of from 10,000 to 15,000; and the diblock (S-(I/B)) is limited to at most 20 mol%. These characteristics of the SBC are simply not found in Ouhadi; they are not there.

Examiner argues that "the butadiene/isoprene blocks in the styrene block copolymers of the prior art would possess the presently claimed properties since the composition of the prior art block copolymers are essentially the same as that claimed composition." (Office Action pg. 3) However, the properties of the SBC are not essentially the same. In fact, the requirements of Applicant's invention are much stricter.

Moreover, the Examiner is forgetting that the SBC is only one part of three of the claimed invention. Applicant's invention requires not only the presence of the SBC, but requires a second thermoplastic resin, and potentially, a plasticizing oil. In contrast, Ouhadi requires the presence of a compatibilizer (see Ouhadi, claim 1). Applicant's invention does not require a compatibilizer. Ouhadi simply cannot anticipate or render obvious Applicant's invention. The specific properties of the SBC are not disclosed. Further, the combination of the particular SBC combined with the second thermoplastic resin as claimed by Applicant is not disclosed by Ouhadi.

The disclosure and teachings of Ouhadi do not render Applicant's invention obvious under 35 U.S.C. §103. Ouhadi is focused on a method to combine polar and non-

polar thermoplastic elastomers. This is achieved by blending the components in a single composition and using a compatibilizer to facilitate the blending of the composition. Ouhadi teaches that the non-polar thermoplastic elastomer comprises between 50-98% by weight, most preferably 70-90%, of the blend. Also, Ouhadi teaches that the polar component is between 50-2% by weight of the total blend. The blending is only achieved through the addition and use of a compatibilizer. Moreover, Ouhadi uses polar thermoplastics selected from thermoplastic urethane, chloro contanining polymers, fluoro containing polymers, polyesters, acrylonitirile-butadiene-styrene copolymers, styrene-acrylonitrile copolymer, styrene-maleic anhydride compolymer, polyacetal, polycarbonate, and polyphenylene oxide. Ouhadi defines the "polar" thermoplastics as ones that "contain in its molecular structure at least one atom selected from nitrogen, oxygen and halogen in addition to carbon and hydrogens." (See Ouhadi paragraph 11).

In contrast to Ouhadi, Applicant's invention does not call for thermoplastics that incorporate nitrogen, oxygen, or halogen in their molecular structure. Also, Applicants invention requires that the polymer block represented by (I/B) have a glass transition temperature (Tg) of at most -60°C. Ouhadi is completely silent with respect to any requirements of glass transition temperature. The focus of Ouhadi is to teach a method by which polar thermoplastics are combined with non-polar thermoplastics to make a blend possessing the benefits of both non-polarity and polarity by using a compatibilizer. In contrast, the focus of Applicant's invention is a composition used in transparent, gel free films; a completely unrelated area. Thus, Applicant's invention necessarily is limited by specific Tg values where Ouhadi is not. Ouhadi cannot render Applicant's

invention obvious when it discloses a SBC with a structure of S-I/B-S if it does not disclose or teach any of the limiting characteristics of the SBC claimed by Applicant.

The Examiner also rejects Applicant's invention as anticipated by, or in the alternative, obvious in view of Zhang et al and Varma. Zhang et al. and Varma fail to disclose, teach, or render obvious Applicant's invention because both Zhang et al. and Varma suffer from the same fault as does Ouhadi – they only suggest an SBC with the structure S-I/B-S. Despite the similar structure, neither Zhang et al. nor Varma teach Applicant's specific invented SBC. While Zhang et al. do teach a styrenic block copolymer, the copolymer taught by Zhang does not have the same characteristics of Applicant's invention. Likewise, the teachings of Varma do not render Applicant's invention obvious because the disclosed SBC is not the same.

In addition to failing to teach Applicant's specific SBC and combination, Zhang et al. are focused on a fundamentally different goal - providing a polymer usable in a microscopically-expanded, three-dimensional, elastomeric web, ultimately used in bandages, dressings, and wraps. Indeed, Zhang et al. require about 20 – 80 % by weight of an elastomeric copolymer, from 3 – 60% of a vinylarene, and from 5 – 60% of a processing oil. (Zhang Claim 1). Also, Zhang et al. are focused on the use of polystyrene-ethylene/butylenes-polystyrene (SEBS) and polystyrene-ethylene-ethylene/propylene-styrene (SEEPS) block copolymers. Moreover, Zhang et al. require the composition to include at least one vinyl arene. No where do Zhang et al. require

specific Tg values for the block copolymers. Further, Zhang does not place any requirements of specific molecular weights for the styrene as does Applicant.

Of the many differences between Zhang et al. and Applicant's invention, Applicant's invention uses a much higher concentration of the styrenic block copolymer. Specifically, Applicant's invention utilizes at least 65 wt% of the styrenic block copolymer. Further, while Zhang et al. focuses on the use of SEBS or SEPS, Applicant's invention does not use SEBS or SEEPS. Instead, Applicant's invention discloses the use of a styrenic block copolymer having a molecular structure of S-(I/B)-S or [S-(I/B)]nX wherein S is styrene and (I/B) is a block of isoprene and butadiene. Applicant's invention does not include block copolymers with the structure of SEBS or SEEPS. Applicant's invention cannot have the structure SEBS or SEEPS. They are excluded by Applicant's independent claim. Indeed, Applicant's disclosure states that the isoprene and butadiene mid-blocks should be prepared from "substantially pure styrene or mixtures comprising at least 95 wt % of styrene ... and substantially pure butadiene or mixtures comprising at least 95 wt % of butadiene." Applicant's invention goes on to state that "preferred block copolymers to be applied according to the present invention contain blocks of substantially pure styrene and mixtures of substantially pure isoprene and butadiene." This contradicts the teachings of Zhang and Varma. Moreover, Applicant's invention does not allow for the use of a vinyl arene. As such, the differences between the teachings of Zhang et al. and Applicant's invented composition are such that Applicant's invention is not rendered obvious in view of Zhang et al.

In contrast to Applicant's invention, Varma does not have anything to do with the creation of films. Varma is directed to and focused on creating a gas impermeable seal from a typically gas permeable thermoplastic elastomer. Thus, Varma is directed to the conversion of a thermoplastic elastomer with unsatisfactory oxygen permeability to one that is oxygen impermeable. Varma teaches that the method by which this conversion is accomplished is plasticizing the elastomer with a "plastic" polymer. Varma teaches blending the thermoplastic elastomer with "polybutene," which Varma defines as isobutylene, homo- and/or copolymers. Varma states that the SBS polymers typically have unacceptable oxygen permeability until they are blended with the polybutene. Varma teaches that blending often results in a polymer that has too high a degree of tackiness, thus necessitating the addition of polybutene oil. Further, Varma teaches that in some instances it is necessary to add a detackifier to the blend.

Varma is concerned and directed to the hardness of the polymers and polymer blend. Specifically, Varma teaches that the SBS blend must have a hardness of Shore A 30 up to 90. Varma is silent with respect to any requirements regarding glass transition temperatures for the SBS polymers, only addressing the Tg values as a result of the hardness characteristics. Also, Varma teaches that the preferred polymer is styrene-ethylene-butylene-styrene (SEBS) copolymer, having an average molecular weight of from about 80,000 to 500,000. Varma does disclose an SBC with the structure S-I/B-S, but simply states "A 'basic blend' of polybutene-plasticized SBS, preferably a tri block in which the mid-block is isoprene/butadiene hydrogentated in heterogeneous relative

order, ..." (Varma paragraph 34). It gives no direction or specification regarding Tg, molecular weight, purity, or any other characteristic required for Applicant's invention.

In contrast to Varma, Applicant's invention is comprised of a styrenic block copolymer with specific requirements. Specifically, having a molecular structure of S-(I/B)-S or [S-(I/B)]nX wherein S is styrene and (I/B) is a block of isoprene and butadiene, having a Tg of at most -60C, having isorprene/butadiene ratios of 30/70 to 70/30, and having a molecular weight of between 110,000 and 160,000 (a much narrower range than that disclosed by Varma). Further, Applicant's invention does not use a detackifier, which Varma does. Thus, Varma does not teach a composition that anticipates or renders Applicant's invention obvious.

The Examiner further states that Applicant's invention is obvious over the cited art because the cited art discloses styrenic block copolymers that can have the structure S-I/B-S. However, Applicant is claiming a composition that includes as one component the SBC, not simply the diene center blocks of the SBC. Specifically, independent claim 11 claims a "composition ... comprising" and then lists three, distinct components of the composition. Only the first component is the styrenic block copolymer with a specific midblock of isoprene/butadiene and with specific glass transition temperature characteristics. There are two additional components that comprise Applicant's invented composition. Thus, the SBC (and its characteristics) must be considered together with the other components of the claimed composition for an analysis of obviousness. When the whole of Applicant's invention is considered, it is clear that the cited prior art does

not render Applicant's invention obvious. Further, even if one looks specifically at the styrenic block copolymer and its characteristics, including structure, average number molecular weight, and glass transition temperature in isolation from the remaining components claimed by Applicant's composition, the specific SBC disclosed by Applicant is not disclosed, taught, or suggested by the cited art. Thus, Applicant's invention is not rendered obvious in view of Ouhadi, Zhang et al., or Varma.

CONCLUSION

It is believed that this Application is now in condition for Allowance and such is solicited.

Respectfully submitted,

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